

WHAT IS CLAIMED IS:

1. - 13. (canceled)
14. (currently amended) A cold rolling method for producing an annular composite workpiece, the method comprising the steps of:

inserting a first hollow cylindrical workpiece into a second hollow cylindrical workpiece, wherein the first and second hollow cylindrical workpieces have radial play relative to one another when inserted into one another and are made of different materials;

axial roll forming a composite workpiece of the first and second hollow cylindrical workpieces by pressing the first and second hollow cylindrical workpieces against each other between two diametrically opposed rotating outer roll forming tools and [[an]] a rotating inner rolling arbor or between two diametrically opposed rotating outer roll forming tools and [[an]] a rotating inner roll forming tool, wherein the two diametrically opposed outer roll forming tools are profiled to produce an outer profile on the composite workpiece, wherein the two diametrically opposed outer roll forming tools are radially advanced and apply radial pressure in inward radial direction and press together surfaces of the first and second hollow cylindrical workpieces, which surfaces touch each other, at a pressure sufficient to effect a cold pressure weld between the first and second hollow cylindrical workpieces, wherein an axis of rotation of the inner rolling arbor or an axis of rotation of the inner roll forming tool and axes of rotation of the two diametrically opposed outer roll forming tools are arranged parallel to each other, respectively, for axial roll forming.
15. (canceled)
16. (previously presented) The method according to claim 14, wherein the radial play relative to one another is such that the first and second hollow cylindrical workpieces can barely be inserted by hand.
17. (previously presented) The method according to claim 14, wherein the first and second hollow cylindrical workpieces are rings.
18. (previously presented) The method according to claim 14, wherein the first and second hollow cylindrical workpieces are pipes.

19. (currently amended) The method according to claim 14, wherein the first and second hollow cylindrical workpieces have surfaces touching one another and wherein at least one of the surfaces that touch each other is coated with an aluminum layer promoting the connection of the first and second hollow cylindrical workpieces during rolling.

20. (previously presented) The method according to claim 14, wherein an aluminum layer is positioned between the first and second hollow cylindrical workpieces for weight reduction of the composite workpiece.

21. (canceled)

22. (previously presented) The composite workpiece according to claim 29, wherein the composite workpiece is a bearing ring.

23. (previously presented) The composite workpiece according to claim 22, wherein the first hollow cylindrical workpieces forming a bearing race of the bearing ring is made of antifriction bearing steel and wherein the second hollow cylindrical workpieces forming a support ring of the bearing ring is made of a steel having a reduced quality compared to the antifriction bearing steel.

24. (previously presented) The composite workpiece according to claim 29, wherein the composite workpiece is a gear ring.

25. (previously presented) The composite workpiece according to claim 29, wherein the first or the second hollow cylindrical workpiece is comprised of a nonferrous metal.

26. (previously presented) The composite workpiece according to claim 25, wherein the nonferrous material is aluminum.

27. (previously presented) The composite workpiece according to claim 29, wherein the first or the second hollow cylindrical workpiece is made of plastic material.

28. (previously presented) The composite workpiece according to claim 29, wherein the first or the second hollow cylindrical workpiece is made of powder material.

29. (previously presented) An annular composite workpiece produced according to the method of claim 14.

30. (previously presented) The method according to claim 14, wherein between the first and second hollow cylindrical workpieces a cold pressure welding connection is produced.

31. (new) A cold rolling method for producing an annular composite workpiece, the method comprising the steps of:

inserting a first hollow cylindrical workpiece into a second hollow cylindrical workpiece, wherein the first and second hollow cylindrical workpieces have radial play relative to one another when inserted into one another and are made of different materials;

axial roll forming a composite workpiece of the first and second hollow cylindrical workpieces by pressing the first and second hollow cylindrical workpieces against each other between two diametrically opposed rotating outer roll forming tools and a rotating inner roll forming tool, wherein the inner roll forming tool is profiled to produce an inner profile on the composite workpiece, wherein the inner roll forming tool is radially advanced and applies radial pressure in outward radial direction and the two diametrically opposed outer roll forming tools are radially advanced and apply radial pressure in inward radial direction and press together surfaces of the first and second hollow cylindrical workpieces, which surfaces touch each other, at a pressure sufficient to effect a cold pressure weld of the first and second hollow cylindrical workpieces, wherein an axis of rotation of the inner roll forming tool and axes of rotation of the two diametrically opposed outer roll forming tools are arranged parallel to each other, respectively, for axial roll forming.